Mother Nature's skies determines if the Wolf Pack flies

By 1st Lt. Kelly Cahalan
8th Fighter Wing Public Affairs

Photo by Capt. Chris Karns, 8th FW/PA

Staff Sgt. Michael Milton, 8th Operations Support Squadron weather forcaster, monitors the weather pattern to determine the amount of rain accumulation.

"Instability snow showers due to the 850 millibar temperatures," Capt. Troy Johnson, 8th Operations Support Squadron Weather Flight commander muttered as he pored over data being sent down from Korea's theater forecast unit, the 607th Weather Squadron at Yongsan Army Garrison in Seoul.

"Basically, cyclonic air flow patterns and cold sea-surface temperatures," added his chief forecaster, Staff Sgt. Dorothy Posey.

Both look out the plate windows of their office toward the Yellow Sea trying to decipher what the winds will bring.

"Some of our data points to between six and eight inches of snow, and some of the data is pointing to less than two," explained Johnson. "It's our job to narrow it down and advise the commanders what the most likely outcome will be so they can make the right decisions to run the base and do the mission."

Obviously, a fighter squadron's training schedule is somewhat dependant upon what the weather decides to do, but there are other areas as well, such as scheduling the 8th Civil Engineer Squadron's snow removal teams.

Kunsan receives weather models from three different sources to forecast for the base every 12 to six hours; the U.S. Navy, the National Weather Service and the Air Force.

"Weather models are a computer's attempt to determine the weather forecast," said Johnson. "Each model has its own quirks based on how it approximates."

The Wolf Pack weather flight uses personal experience and weather models to determine what the weather forecast will be.

Being in Korea presents unique challenges for the forecasters, according to Staff Sgt. Chad Smith, a forecaster with the flight.

"So far in my career, Kunsan has been the hardest place for me to forecast because there are no observation stations to the west of us," he said. "Normally, we call up other stations or even ships. The only thing west of us here is the Yellow Sea and China."

The Kunsan weather team has 14 people manning its office. The shop is manned 24-hours a day, seven days a week.

During non-duty hours and non-flying hours, there is still an observer on duty who must check wind, visibility and temperature once every hour.

"The real work is done with the squadrons," said Johnson. "We try to emphasize service to our main customer, the pilots."

Eight forecasters rotate working in each of the fighter squadrons where they can brief pilots on weather conditions by the minute, if necessary.

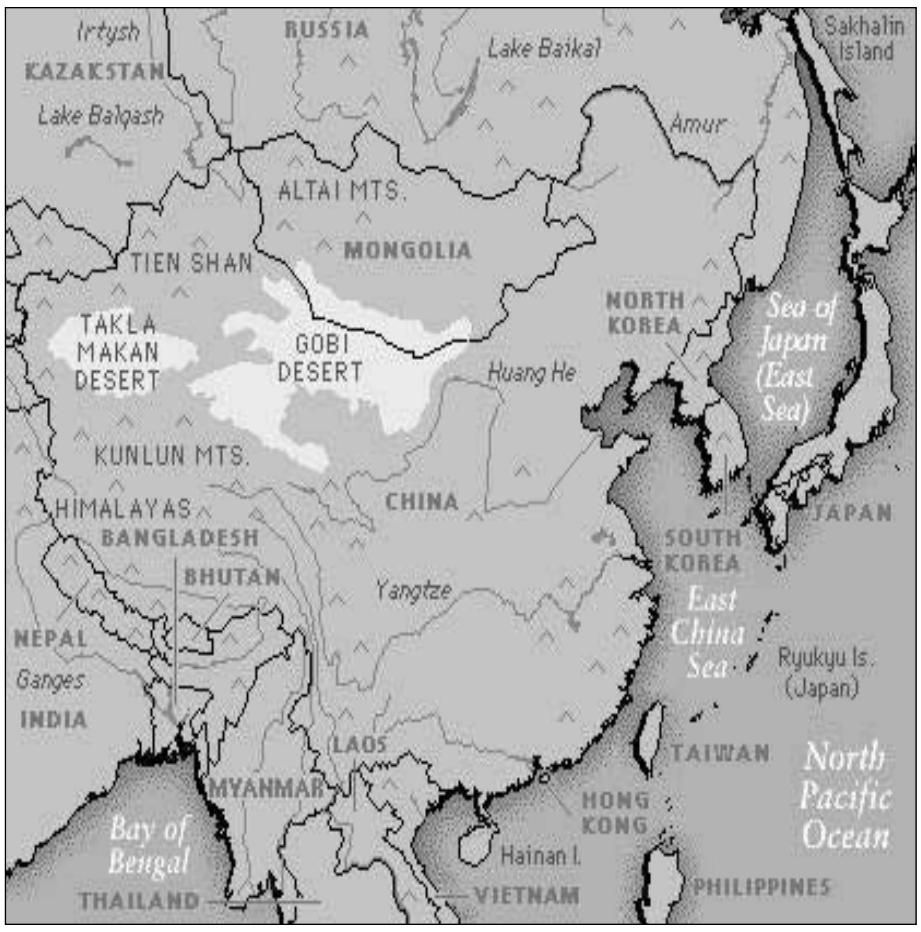
"One of the benefits of having a forecaster working directly for a squadron is instant weather access to the squadron's top three in the chain of command," said Smith, who works with the 80th Fighter Squadron.

"Plus, we are able to meet and interact with the pilots, our main customer. It helps to build trust and confidence on what (the weather) will be like out there," added Smith.

During Kunsan's recent operational readiness inspection, the inspectors were surprised at how integrated the weather flight was with overall base operations, said Smith.

To keep up to date on current weather conditions, the Wolf Pack can always turn to Channel 3 or look on the weather web site.

And while the weather team can't force the sun to shine and the typhoons to stay away, they are always there to provide the latest forecasts.



Gone with the wind

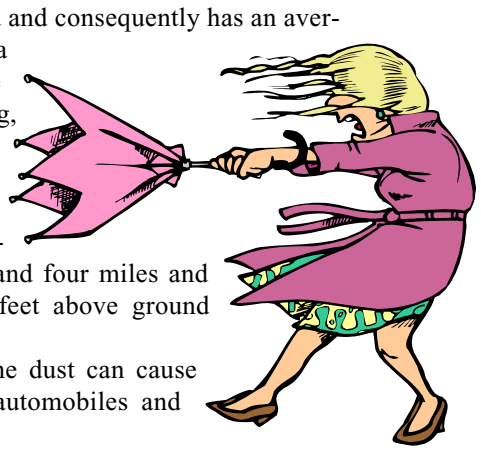
Weather flight explain 'Yellow Wind' occurrence

By 8th Operations Weather Flight

If you're curious about the yellow dust left on windows, bikes and just about every other surface around the base, you'll have to look far west for answers.

The phenomena known as "Yellow Wind" occurs when strong winds from the earth's surface, up to 20,000 feet, lift and carry dust and fine sand from the Gobi Desert and Loess Plateau from Inner Mongolia and Inner China into Korea, Okinawa and Japan.

A substance called loess, a mixture of tiny particles of rocks and other minerals that have a yellow tint, is the main ingredient in the dusty wind. China has the greatest quantities of loess in the world and consequently has an average of 10 episodes of Yellow Wind a year. Korea averages two to three occurrences of Yellow Wind each spring, usually between April and May and within one day after an intense cold frontal passage.



During Yellow Wind incidents, visibility can be limited to between two and four miles and from around 500 feet up to 20,000 feet above ground level.

In addition to reduced visibility, the dust can cause maintenance concerns with aircraft, automobiles and other machinery.